may also contain identification codes of other participants in said transaction such as distributors, claimants, retailers, syndicates or advertising placement agencies;

a field containing data defining the type of resource consumed;

a field containing data defining the amount of resource consumed.

2. The medium of claim 1 wherein said data structure stored thereon further comprises:

a field containing data defining the time for said transaction.

3. The medium of claim 2 wherein said data structure further comprises:

a field containing data providing a qualitative description of the resources consumed such as quality of service, speed, or capacity of a delivery network consumed in delivering said resource.

4. The medium of claim 1 wherein said data structure stored thereon further comprises:

a field containing data defining the underlying network routing used to carry out said transaction.

5. A computer readable medium having stored thereon a data structure comprising:

a plurality of fields, each containing data representing an identification code of a participant in a transaction on a value chain, said fields including at least a supplier identification code, a customer identification code, a consumer identification code, and fields containing identification codes for any other types of entities involved in the transaction;

a field containing timestamp data indicating when said transaction occurred;

a field containing data indicating a type of resource consumed; and

a field containing data indicating a quantity of resource consumed.

6. The computer readable medium of claim 5 wherein said fields containing the identification codes of other participants in said transaction includes fields which store identification codes of:

one or more distributors who distributes said resource;

one or more retailers who sells said resource to said consumer;

one or more claimants who supplies goods or services to any of said supplier, distributor or retailer in support of said transaction and who has a claim on the revenues earned from said transaction by said supplier, distributor or retailer;

one or more advertising placement agencies who participate in said transaction by advertising;

and wherein there may be multiple fields for each type participant, each containing a different identification code of a different participant of the same type and wherein the number of said fields equals the number of participants in said transaction and only fields for participants in a transaction are present.

7. A computer readable medium having stored thereon a data structure comprising at least the following objects:

one or more balance objects, each comprising a plurality of fields, at least one of which contains net balance data that defines the net balance of debits and credits for a transaction between a first participant who is a buyer or debtor in said transaction and a second participant who is a seller or creditor in said transaction, said transaction being in a value chain having at least two participants, at least one field in each said balance object containing data pointing to an address in memory where data regarding said first participant is stored, at least a second field containing data pointing to an address in memory where data regarding said second participant is stored, and wherein each debtor participant may have multiple

balance objects associated therewith, and wherein each creditor participant may have multiple balance objects associated therewith;

one or more debtor objects, each comprising a plurality of fields that contain data that identify a particular debtor in said transaction and which contain attribute data regarding said debtor, at least one field in each debtor object data pointing to a pertinent balance object recording a debit/credit balance between said debtor and a creditor represented by a creditor object in said data structure, and wherein each debtor object may contain pointers to multiple balance objects each of said balance objects recording a debit/credit balance between said debtor and a particular creditor;

one or more creditor objects, each comprising a plurality of fields that contain data that identify a particular creditor, and each of which contains attribute data of said creditor, at least one field in each said creditor object pointing to a pertinent balance object which stores a debit/credit balance between said creditor and a debtor represented by a debtor object in said data structure, and wherein each said creditor object may contain pointers to multiple balance objects;

one or more product type objects, each comprising a plurality of fields that contain data that define a type of product or resource consumed in said transaction, each product type object having at least one of said fields containing data that points to a pertinent creditor object for a creditor that sells or licenses or leases or otherwise distributes the type of resource involved in said transaction, and wherein multiple product type objects can point to the same creditor object;

one or more product instance objects, each comprised of a plurality of fields that contain data that define a choice by a consumer of a particular price plan for consumption of a resource in said value chain, at least one of said plurality of fields containing data pointing to a price plan object, and at least one of said plurality of fields containing data pointing to a product type object, and at least one of said plurality of fields containing a pointer to a debtor object;

one or more price plan objects, each of which comprises a plurality of fields that contain data that define a price plan defining the price per unit for consumption or purchase of a particular type of product or resource which may be consumed in said transaction, each said price plan

object having a field containing a pointer to a pertinent product type object.

8. The computer readable medium of claim 7 wherein said data structure further comprises:

one or more sponsor data objects, each of which comprises a plurality of fields that store data identifying and defining attributes of a sponsor participant in said value chain, at least one field of each said sponsor data object containing a pointer to a sponsor price plan object, and at least one field of each sponsor data object containing a pointer to a balance data object;

at least one balance data object corresponding to each sponsor data object, each balance data object storing data defining a debit/credit balance between a sponsor identified by said corresponding sponsor data object and a seller identified by a corresponding seller data object, at least one field of each said balance data object containing a pointer to said corresponding seller data object and at least one field containing a point to said corresponding sponsor data object; and

at least one sponsor price plan containing price per unit data for financial terms which represent a relationship between a sponsor and a seller object, each sponsor price plan comprising a plurality of fields at least one of which contains a pointer to a corresponding sponsor data object.

9. A process for computing accounting information pertaining to a transaction that crosses business boundaries in a value chain having two or more participating businesses or entities, comprising the steps:

(1) identifying a buyer participant in a transaction that crosses business boundaries using the consumer identification code in an RDR data structure recording data of said transaction;

(2) identifying a seller participant in said transaction using a customer identification code in said RDR data structure recording data of said transaction;

(3) identifying a product type involved in said transaction;

(4) identifying a product instance involved in said transaction;

(5) identifying a price plan which records data defining the terms which govern calculation of charges for units of said product type consumed in said transaction;

(6) calculating a payment amount using a price per unit from said price plan and a number of units consumed from said RDR recording data pertaining to said transaction;

(7) finding a balance object which records the monetary balance as between said buyer participant and said seller participant in said transaction, and adding or subtracting the calculated payment amount to a balance recorded in said balance object, as appropriate;

(8) determining if there is another tier in said value chain;

(9) if there is another tier in said value chain, selecting two participant identification codes for participants on said tier and repeating steps (1) through (7) using said RDR and said two participant identification codes selected in this step 9 as said consumer and customer identification codes as appropriate;

repeating steps (8) and (9) as many times as is necessary to process account balances between all participants on all tiers in said value chain.

10. The process of claim 9 wherein said step of identifying a product type is accomplished by reading a resource type field in said RDR data structure.

11. The process of claim 9 wherein said step of identifying a product instance is accomplished by searching all product instances data objects for ones which have pointers to said buyer participant involved in said transaction, and searching the resulting product instance data objects for the one which has a pointer to said product type involved in said transaction.

12. The process of claim 9 wherein said step of identifying a price plan involves following

pointers in said product type and product instance data objects which both point to a data object recording the appropriate price per unit price plan pertaining to this transaction.

13. The process of claim 9 wherein said step of determining whether there is another tier in said value chain comprises determining if there is a valid supplier ID in said RDR.

14. The process of claim 9 wherein step (9) comprises copying the current RDR to a new RDR but shifting the participant IDs so that the original customer ID is the consumer ID in the new RDR and the supplier ID in the original RDR is the customer ID in the new RDR or just modifying original RDR by shifting the participant IDs so that the customer ID in the original RDR is shifted to the consumer ID field in the modified RDR and the supplier ID in the original RDR is shifted to the customer ID field in the modified RDR .

15. A computer readable medium having computer-executable instructions stored thereon for controlling a computer to perform a method comprising the steps:

(1) identifying a buyer participant in a transaction that crosses business boundaries using the consumer identification code in an RDR data structure recording data of said transaction;

(2) identifying a seller participant in said transaction using a customer identification code in said RDR data structure recording data of said transaction;

(3) identifying a product type involved in said transaction;

(4) identifying a product instance involved in said transaction;

(5) identifying a price plan which records data defining the terms which govern calculation of charges for units of said product type consumed in said transaction;

(6) calculating a payment amount using a price per unit from said price plan and a number of units consumed from said RDR recording data pertaining to said transaction;

(7) finding a balance object which records the monetary balance as between said buyer participant and said seller participant in said transaction, and adding or subtracting the calculated payment amount to a balance recorded in said balance object, as appropriate;

(8) determining if there is another tier in said value chain;

(9) if there is another tier in said value chain, selecting two participant identification codes for participants on said tier and repeating steps (1) through (7) using said RDR and said two participant identification codes selected in this step 9 as said consumer and customer identification codes as appropriate;

repeating steps (8) and (9) as many times as is necessary to process account balances between all participants on all tiers in said value chain.

16.   The computer readable medium of claim 15 wherein the computer-executable instructions stored thereon further control a computer to execute the following steps:

identifying a product type by reading a resource type field in said RDR data structure.

17.   The computer readable medium of claim 15 wherein the computer-executable instructions stored thereon further control a computer to execute the following steps:

identifying a product instance by searching all product instances data objects for ones which have pointers to said buyer participant involved in said transaction, and searching the resulting product instance data objects for the one which has a pointer to said product type involved in said transaction.

18.   The computer readable medium of claim 15 wherein the computer-executable instructions stored thereon further control a computer to execute the following steps:

identifying a price plan by following pointers in said product type and product instance data objects which both point to a data object recording the appropriate price per unit price plan

pertaining to this transaction.

19. The computer readable medium of claim 15 wherein the computer-executable instructions stored thereon further control a computer to execute the following steps:

determining whether there is another tier in said value chain by determining if there is a valid supplier ID in said RDR.

20. The computer readable medium of claim 15 wherein the computer-executable instructions stored thereon further control a computer to execute the following steps:

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copying the current RDR to a new RDR but shifting the participant IDs so that the original customer ID is the consumer ID in the new RDR and the supplier ID in the original RDR is the customer ID in the new RDR or just modifying original RDR by shifting the participant IDs so that the customer ID in the original RDR is shifted to the consumer ID field in the modified RDR and the supplier ID in the original RDR is shifted to the customer ID field in the modified RDR.